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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,550

10/01/2008

Geoffrey Robert HAMMOND

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08/10/2010

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EXAMINER

CHAUDHRY, SAEED T

ART UNIT

PAPER NUMBER

1711

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DELIVERY MODE

08/10/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,550	<b>Applicant(s)</b> HAMMOND ET AL.	
	<b>Examiner</b> Saeed T. Chaudhry	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/28/06; 12/20/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

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## **DETAILED ACTION**

Applicant's preliminary amendments and remarks filed July 28, 2010 have been acknowledged by the examiner and entered. Claims 1-22 are pending in this application for consideration.

### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

### **Drawings**

The drawings are objected to because in the specification characters 38 as a shaft on page 9 at line 6 is recited. This element is not present in the drawings. Reference characters mentioned in the description must appear in the drawings. See MPEP 608.02(O)5. Correction is required.

### **The Title**

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### **The Specification**

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

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- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

The disclosure is objected to because of the following informalities:

Heading for all the sections are missing particularly "Brief Description of Drawings".

Appropriate correction is required.

#### **Claim Rejections - 35 USC § 112**

**Claims 18, 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The phrase "generally" in claim 18, renders the claim indefinite because the resulting claim does not clearly set forth the mates and bounds of the patent protection desired.

Claims 20 and 21 are incomplete and indefinite since it is not clear what applicant is intending to encompass.

#### **Claim Rejections - 35 USC § 102**

**The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:**

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A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) he has abandoned the invention.

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(f) he did not himself invent the subject matter sought to be patented.

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

**Claims 1-6 and 13-21 are rejected under 35 U.S.C. 102(b) as being anticipated by**

**DE-1813880.**

DE-1813880 discloses an apparatus and method for driving a cleaning apparatus having drive means (14) and cleaning means (vacuum cleaner), wherein the drive means (14) are operable to drive the cleaning means (vacuum cleaner) across a surface to be cleaned, and wherein the drive means (14) are operable to adopt first and second driving modes, the first driving mode being a traveling mode and the second driving mode being a turning mode, wherein locking means (20) of the drive means allow selection between the first and second driving modes (see fig. 1-2). The reference also, discloses that means of sensors arranged at the outside of the apparatus housing, which turn around the direction of rotation of the motor with contact with an obstacle. The apparatus has at least one wheel (12, 13) and a rotational axis (19) for rotating driving wheels to move the body (10). If the apparatus discovers an obstacle, then the

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spring force (in the slip clutch) is overcome and the wheel (12) becomes free and wheel (13) remains rotating for turning the apparatus (see translation).

**Claim Rejections - 35 USC § 103**

**The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 7-12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE-1813880 in view of Nakanishi.**

DE-1813880 was discussed supra. However, the reference fails to disclose lacking means are actuated by an activation element or a detent means.

Nakanishi (5,815,880) discloses an apparatus and method for cleaning a surface and moving the apparatus. The apparatus having driving means (col. 3, line 7) and cleaning means (2A, 3A), wherein drive means are operable to drive the cleaning means across a surface to be cleaned, and wherein the drive means are operable to adopt first and second driving modes, the first driving mode a traveling mode and the second driving mode being a turning mode (see col. 3, lines 4-51 and col. 7, lines 26-67). The unit (2) has sensors (3B and 3C) on the periphery to

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sense obstacle, wherein the apparatus moves backward or turns around (col. 8, lines 1-41). The reference fails to disclose a locking means.

It would have been obvious at the time applicant invented the claimed apparatus and process to incorporate sensors as disclosed by Nakanishi into the apparatus and process of DE-1813880 for the purpose of change the course of the apparatus by detecting the obstacle with well known sensors. Nakanishi discloses to overridden the obstacle by sensing only with one sensor. Therefore, one of ordinary skill in the art would have arranged to be overridden the obstacle. Connecting with electrical means, detent means and inter engaging projection are well known in the art. Therefore, one of ordinary skill in the art would have use in the apparatus of DE-1813880 for the purpose of efficient movement of the device on the surface. The shape defined in the claimed invention is merely design choices that can be suitably selected by a designing person according to the necessity, which cannot be considered to have critical significance.

#### **The Prior art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hiratsuka (5,309,592) disclose a cleaning robot to be self propelled on a floor along a side wall and a cleaning mechanism mounted on the robot. The device changes the direction and slide device mounted on the robot and reciprocatingly movable toward and away from the side wall.

***Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.***

***If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (571)-273-8300.***

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*When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*

***Saeed T. Chaudhry***  
***Patent Examiner***

/Michael Barr/  
Supervisory Patent Examiner, Art Unit 1711